



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,516	06/26/2003	Gerald Francis McBrearty	AUS920030312US1	6028
35525	7590	03/22/2005	EXAMINER	
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			KIM, HAROLD J	
			ART UNIT	PAPER NUMBER
			2182	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/607,516

**Applicant(s)**

MCBREARTY ET AL.

**Examiner**

Harold Kim

**Art Unit**

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06262003</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-20 are presented for examination.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Padmanabhan et al., US Pub. No. US 2004/0107300 A1.**

4. In re claim 1, Padmanabhan et al. shows a method for performing multiple path input/output [fig 4], the method comprising:

configuring a path control module [290, 310, 280 in fig 4; paragraph 0022, lines 7-10] for a device [330 in fig 4] with a set of primary paths [paragraph 0094] for the device;

configuring the path control module [290, 310, 280 in fig 4; paragraph 0022, lines 7-13] with a set of standby paths [272, 274, 276 in fig 4] for the device; and

issuing transactions [paragraph 0022, lines 9-10] to device using the set of primary paths.

5. In re claim 2, Padmanabhan et al. shows determining a first path within the set of primary paths [paragraphs 0099, and 0112];

issuing a transaction to the device using the first path [paragraph 0112]; and

responsive the transaction failing, failing over to the set of standby paths  
[paragraph 0118, lines 3-5].

6. In re claim 3, Padmanabhan et al. shows determining a second path within the set of standby paths [paragraph 0118, lines 3-5; paragraphs 0121 and 0122]; and

issuing the transaction to the device using the second path [paragraph 0122].

7. In re claim 4, Padmanabhan et al. inherently shows marking the first path as down inactive since Padmanabhan et al. shows information about an available path to the vHCL [paragraph 0160].

8. In re claim 5, Padmanabhan et al. shows responsive to the first path being restored, failing back the set of primary paths [paragraph 0146].

9. In re claim 6, Padmanabhan et al. shows first path is determined using round robin approach [paragraph 0151, lines 3-4].

10. In re claim 7, Padmanabhan et al. shows determining first path within the set primary paths [paragraphs 0099, and 0112];

issuing transaction to the device using the first path [paragraph 0112];

responsive the transaction failing, determining a second path within the set of standby paths [paragraph 0118, lines 3-5]; and

issuing the transaction to the device using the second path [paragraph 0118, lines 3-5].

Art Unit: 2182

11. In re claim 8, Padmanabhan et al. inherently shows marking the first path as down inactive since Padmanabhan et al. shows information about an available path to the vHCL [paragraph 0160].

12. In re claim 9, Padmanabhan et al. shows responsive to the first path being restored, adding the first path back the set of primary paths and adding second path back to the set of standby paths [paragraph 0146].

13. In re claim 10, Padmanabhan et al. shows first path is determined using round robin approach [paragraph 0151, lines 3-4].

14. In re claim 11, Padmanabhan et al. shows the device is a first device and the path control module is first path control module [209 in fig 4], the method further comprising:

configuring a second path control module [300 in fig 4] for the second device set of primary paths for the second device, wherein the set of primary paths for the second device is set standby paths for the first device [paragraph 0149]; and

configuring the path control module with the set standby paths for the second device, wherein the set of standby paths for the second device is the set of primary paths for the first device [paragraph 0149].

15. In re claim 12, Padmanabhan et al. shows an apparatus for performing multiple path input/output [fig 4], the apparatus comprising:

a path control module [290, 310, 280 in fig 4; paragraph 0022, lines 7-10] for a device [330 in fig 4], wherein the path control module is configured with a set of primary

Art Unit: 2182

paths [paragraph 0094] for the device and a set of standby paths [272, 274, 276 in fig 4] for the device; and

a device driver [230, 260, fig 3] for the device, wherein the device driver issues transactions to the device using paths selected from the set of primary paths [paragraph 0022, lines 9-10].

16. In re claim 13, Padmanabhan et al. shows the path control module receives a transaction request [paragraph 0022, lines 9-10] from the device driver and determines a first path within the set of primary paths [paragraph 0094];

wherein the device driver issues a transaction to the device using the first path [paragraph 0112]; and

wherein the path control module fails over to the set of standby paths responsive to the transaction failing [paragraph 0118, lines 3-5].

17. In re claim 14, Padmanabhan et al. shows the path control module determines a second path within the set of standby paths [paragraph 272, 274, 276 in fig 4] and wherein the device driver issues the transaction to the device using the second path [paragraph 0118, lines 3-5].

18. In re claim 15, Padmanabhan et al. shows the path control module fails back the set of primary paths responsive to the first path being restored [paragraph 0146].

19. In re claim 16, Padmanabhan et al. shows the path control module determines first path within the set of primary paths [paragraph 0022, lines 7-10];

wherein the device driver issues a transaction the device using first path [paragraph 0022, lines 9-10];

wherein the path control module determines a second path within set of standby paths responsive to the transaction failing [paragraph 0022, lines 7-13]; and

wherein the device driver issues the transaction to the device using the second path [paragraph 0118, lines 3-5].

20. In re claim 17, Padmanabhan et al. shows the path control modules adds first path back to the primary paths and adds the second path back the set of standby paths responsive the first path being restored [paragraph 0146].

21. In re claim 18, Padmanabhan et al. shows a computer program product [paragraph 0046, line 1], in a computer readable medium [paragraph 0046, lines 1-3], for performing multiple path input/output [fig 4], the computer program product comprising:

instructions for configuring a path control module device [290, 310, 280 in fig 4; paragraph 0022, lines 7-10] with set of primary paths for the device [paragraph 0094];

instructions for configuring the path control module with a set of standby paths for the device [272, 274, 276 in fig 4]; and

instructions for issuing transactions to the device using paths selected from the set of primary paths [paragraph 0022, lines 9-10].

22. In re claim 19, Padmanabhan et al. shows instructions for determining a first path within the set of primary paths [paragraphs 0099, and 0112];

Art Unit: 2182

instructions for issuing a transaction to the device using first path [paragraph 0112]; and

instructions, responsive to the transaction failing, failing over set of standby paths [paragraph 0118, lines 3-5].

23. In re claim 20, Padmanabhan et al. shows instructions for determining a first path within the set of primary paths [paragraphs 0099, and 0112];

instructions for issuing a transaction to the device using the first path [paragraph 0112];

instructions, responsive to the transaction failing, for determining a second path within the set of standby paths [paragraph 0118, lines 3-5]; and

instructions for issuing the transaction to the device using second path [paragraph 0022, lines 7-13].

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any response to this action should be mailed to:

Mail Stop \_\_\_\_\_  
Commissioner for Patents



P.O. Box 1450  
Alexandria, VA 22313-1450

The centralized fax number is 703 872-9306.

The centralized hand carry paper drop off location is:

U.S. Patent and Trademark Office  
2011 South Clark Place  
Customer Window  
Crystal Plaza Two, Lobby, Room 1B03

Any inquiry of a general nature or relating to the status of this application should be directed to the central telephone number (571) 272-2100.

Direct any inquiries concerning drawing review to the Drawing Review Branch (703) 305-8404.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold Kim whose telephone number is 571-272-4148. The examiner can normally be reached on Monday-Thursday 6AM-4PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Harold J. Kim  
Patent Examiner  
March 18, 2005/HK



JEFFREY CAFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100